

REMARKS**I. General**

Claims 1-31 were pending in the present application and were rejected in the current Office Action (mailed March 4, 2005). The outstanding issues in the current Office Action are:

- Claims 1-4, 6-11, and 13-21 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,125,401 to Huras et al. (hereinafter "*Huras*");
- Claims 5, 12, and 22-31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Huras* in view of U.S. Patent No. 6,563,821 to Hong et al. (hereinafter "*Hong*").

In response, Applicant respectfully traverses the outstanding claim rejections, and requests reconsideration and withdrawal thereof in light of the remarks presented herein.

II. Summary of Telephonic Interview with Examiner

Applicant's attorney, Jody Bishop, received a telephone call from the Examiner, Le H. Luu, February 22, 2005. In accordance with M.P.E.P. § 713.04, Applicant submits the following as record of that telephone interview with the Examiner.

The Examiner indicated that he believed claim 1 was not allowable over *Huras*. However, the Examiner indicated that claim 5 was believed to be allowable and suggested that claim 5 be rewritten in independent form. Applicant's attorney declined to make this amendment, maintaining that claim 1 was not anticipated by *Huras*.

III. Rejection Under 35 U.S.C. § 102(e) Over *Huras*

Claims 1-4, 6-11, and 13-21 are rejected under 35 U.S.C. § 102(e) as being anticipated by *Huras*. To anticipate a claim under 35 U.S.C. § 102, a single reference must teach every element of the claim, *see* M.P.E.P. § 2131. Applicant respectfully submits that *Huras* fails to teach all elements of these claims, and thus fails to anticipate the claims, as discussed further below.

Independent Claims 1, 15, 16, and 21

Claim 1 recites “establishing a network connection between a server and an external client, the network connection including a client-to-server channel and a server-to-client channel” (emphasis added).

Claim 15 recites “first means for maintaining a queue of connections based on connection requests, each connection communicatively coupling the server with an external client via a communication network, and each connection including a client-to-server channel and a server-to-client channel” (emphasis added).

Claim 16 recites “a server program encoded in the computer memory, the server program commanding the processing unit to (a) accept network connections for communicatively coupling the server with external clients via a communication network, each connection having a client-to-server channel and a server-to-client channel” (emphasis added).

Claim 21 recites “instructions for commanding a processing unit of a server computer to maintain a queue of network connections with external clients based on connection requests” (emphasis added).

The teachings of *Huras* relied upon in the current Office Action are not directed to a connection between a server and an external client. The client and server processes of *Huras* are processes located on a common computer. For instance, *Huras* expressly states in reference to FIGURE 1 that “Box 100 represents a single machine computer system”. Col. 4, lines 40-41. Thus, the client processes 140 and 150 and server processes 340 and 350 of *Huras* are executing on a common machine. Accordingly, the inter-process communications between the client processes and server processes of *Huras* are not communications between a server and an external client.

The current Office Action asserts that *Huras* “inherently teaches a client-server system where a terminal and personal computer both have network interface cards that connect to a main computer via a network (figure 1; col. 1 lines 10-55; col. 4 lines 39-65).” Page 5 of Office Action. Indeed, *Huras* does show a client-server system in which a terminal

141 and PC 151 are connected to the single machine computer system 100. However, as discussed further below, independent claims 1, 15, 16, and 21 each determine whether the client-to-server channel of a connection between a server and an external client is still established. *Huras* does not teach determining whether a client-to-server channel of the network connection with these external computers is still established. As discussed further below, *Huras* does not address the network connection between the external clients and the computer 100, but is instead focused on detecting whether processes executing on computer 100 have terminated (which may terminate irrespective of whether a client-to-server channel between an external client and computer 100 remains established).

Independent claim 1 claim recites “before preparing a response to the client request, the server examining local server information to determine whether the client-to-server channel of the network connection with the requesting client is still established; and the server not preparing the response to the client request if the client-to-server channel is determined to be no longer established” (emphasis added).

Independent claim 15 recites “third means for examining local server information to determine whether the client-to-server channel of a given connection from the queue is still established; and fourth means for aborting response preparation if it is determined that the client-to-server channel of the given connection is no longer established” (emphasis added).

Independent claim 16 recites “(b) before a response to a client requesting the response is prepared by the server, examine local server information to determine whether the client-to-server channel of a connection with the requesting client is still established, and (c) abort response preparation if the client-to-server channel of the connection with the requesting client is determined to be no longer established” (emphasis added).

Independent claim 21 recites “instructions for commanding the processing unit to examine local server information to determine whether a client-to-server channel of an accepted connection from the queue is still established; instructions for commanding the processing unit to process a client request associated with the accepted connection to prepare a response to the client if the client-to-server channel of the accepted connection is first determined as still established; and instructions for commanding the processing unit to forego

response preparation for the associated client request if the client-to-server channel of the accepted connection is determined as no longer established" (emphasis added).

Huras does not teach determining whether a client-to-server channel with an external client is still established. Therefore, *Huras* does not teach performing actions based on such determination, such as foregoing response preparation if the client-to-server channel is determined as no longer established (as recited by claim 21).

Figure 1 of *Huras* shows that a terminal 141 and PC 151 are coupled to single machine computer system 100. While machine 100 may be a server for external client computers 141 and 151, *Huras* does not teach handling the connections between such computer 100 and external client computers 141 and 151 in the manner recited by claims 1, 15, 16, and 21. *Huras* does not address the connections of external client computers 141 and 151 to the computer 100. Specifically, *Huras* does not address how to handle the preparation of responses to such external client computers in the event that their communication channels with the computer 100 is terminated.

Rather, *Huras* is concerned with the processes executing on computer 100. The client processes 140, 150 do not represent external computers 141 and 151 in *Huras*. That is, client process 140 is not a representation of external computer 141 (or the client-to-server channel) on computer 100, and client process 150 is not a representation of external computer 151 (or the client-to-server channel) on computer 100. Rather, an application on an external client may interact with a client process on computer 100. Various client processes may be executing on computer 100 for each of the external computers 141, 151. For instance, *Huras* explains as follows:

When a user operating a terminal 141 runs an application which is designed to interact with a service provider incorporating the present invention, the application program establishes the client process 140 running on the computer system 100. ... (Col. 5, lines 10-14)

A similar initialization process takes place for each new client process. For example, client process 150 can be started by an application program, which could be the same application program which established client process 140, or a different application. For example, one application can be a financial data application whereas the other application can be a human resources

application, wherein each accesses data from the same DBMS service provider. (Emphasis added). (Col. 6, lines 17-25).

Accordingly, client processes on computer 100 are processes that support a given application on an external computer (such as computers 141, 151). But, the client processes are not representative of a connection (e.g., client-to-server channel) between an external client and the server. For instance, just because a client process terminates does not necessarily mean that the client-to-server communication channel with an external computer no longer persists.

Huras addresses situations in which the client processes executing on machine 100 terminate abnormally, such as being terminated by an operating system due to an addressing violation, *see e.g.*, col. 1, lines 1-55. Because the client processes do not represent a connection of an external client, an abnormal termination of such client processes does not mean that the external client has terminated its communication. Rather, a client process may abnormally terminate (e.g., due to machine 100's OS detecting an addressing violation) while the associated external client remains communicatively coupled to the machine 100. For instance, client process 140 may abnormally terminate, while a communication channel between external terminal 141 and computer 100 persists.

Accordingly, the inter-process interactions between the client processes and server processes on computer 100 of *Huras* do not teach determining whether a client-to-server channel of a network connection with a client is still established, nor does *Huras* teach performing any action (such as aborting preparation of a response) based on a determination that a client-to-server channel is no longer established (as *Huras* does not teach determining whether such client-to-server channel is established). While *Huras* is concerned with determining whether a client process executing on computer 100 has terminated, *Huras* does not teach determining whether a client-to-server channel between computer 100 and an external computer remains established. Again, merely because a client process terminates does not provide a determination in *Huras* as to whether a client-to-server channel with an external computer has terminated (e.g., the client process may terminate due to an addressing violation encountered by the operating system of computer 100, *see col. 1, lines 27-31 of Huras*).

Thus, independent claims 1, 15, 16, and 21 are not anticipated by *Huras* at least for the above reasons. Therefore, Applicant respectfully requests that the rejection of these claims be withdrawn.

Independent Claim 8

Claim 8 recites a network server comprising:

a network interface card for communicatively coupling with a client via a communication network; and
computer memory programmed to, responsive to a communicative coupling that includes a client-to-server channel and a server-to-client channel being established with a client and the server receiving from the client a request for a response, cause the processing unit to
(a) examine local server information to determine whether the client-to-server channel is still established with the client requesting a response from the server, and
(b) prepare a response to the requesting client only if the client-to-server channel with the requesting client is first determined to still be established. (Emphasis added).

As described above with claims 1, 15, 16, and 21, the inter-process interactions between the client processes and server processes on computer 100 of *Huras* do not teach determining whether a client-to-server channel of a network connection with a client is still established, and therefore *Huras* does not teach performing any action based on a determination of whether the client-to-server channel is still established, such as preparing a response to a requesting client only if the client-to-server channel with the requesting client is first determined to still be established. While *Huras* is concerned with determining whether a client process executing on computer 100 has terminated, *Huras* does not teach determining whether a client-to-server channel between computer 100 and an external computer remains established. Again, merely because a client process terminates does not provide a determination in *Huras* as to whether a client-to-server channel with an external computer has terminated (e.g., the client process may terminate due to an addressing violation encountered by the operating system of computer 100).

Thus, independent claim 8 is not anticipated by *Huras* at least for the above reasons. Therefore, Applicant respectfully requests that the rejection of this claim be withdrawn.

Dependent Claims 2-4, 6-11, 13-14, and 17-20

Dependent claims 2-4, 6-11, 13-14, and 17-20 stand rejected under 35 U.S.C. § 102(e) as being anticipated by *Huras*. In view of the above, Applicant respectfully submits that independent claims 1, 15, 16, and 21 are not anticipated by *Huras* because *Huras* fails to teach every element of those independent claims. Further, each of dependent claims 2-4, 6-11, 13-14, and 17-20 depend either directly or indirectly from one of independent claims 1, 15, and 16, and thus inherit all limitations of the respective independent claim from which they depend. It is respectfully submitted that dependent claims 2-4, 6-11, 13-14, and 17-20 are allowable not only because of their dependency from their respective independent claims for the reasons discussed above, but also in view of their novel claim features (which both narrow the scope of the particular claims and compel a broader interpretation of the respective base claim from which they depend).

IV. Rejections Under 35 U.S.C. § 103(a)

Claims 5, 12, and 22-31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Huras* in view of *Hong*. Dependent claims 5, 12, and 22-31 each depend either directly or indirectly from one of independent claims 1, 15, 16, and 21, and thus inherit all limitations of the respective independent claim from which they depend. It is respectfully submitted that dependent claims 5, 12, and 22-31 are allowable not only because of their dependency from their respective independent claims for the reasons discussed above, but also in view of their novel claim features (which both narrow the scope of the particular claims and compel a broader interpretation of the respective base claim from which they depend).

V. Conclusion

In view of the above, Applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-2025, under Order No. 10982056-1 from which the undersigned is authorized to draw.

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Label No. EV 482710022US in an envelope addressed to: M/S Amendment, Commissioner for Patents, Alexandria, VA 22313.

Date of Deposit: May 11, 2005

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Respectfully submitted,

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